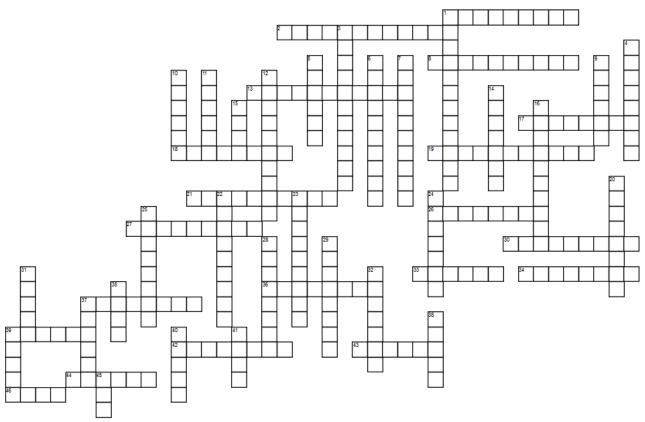
## Unmanned Aerial Systems (UAS)

## Safety First!



## **ACROSS**

- 1 Relating to the science or business of building and flying airplanes and space vehicles
- 2 Back edge of an airfoil, on a wing or propeller blade (2 words)
- 8 An airfoil that rotates in an approximately horizontal plane, providing all the lift in a helicopter (2 words)
- 13 Device that sends commands to Receiver, controlled by pilot.
- 17 What you have to do if you have a UAS
- 18 A control on a radio transmitter, it changes speed of the motors
- 19 Straight line which an observer has unobstructed vision (3 wds)
- 21 Type of multicopter that has 4 motors
- 26 Something that flies
- 27 A machine used for training pilots that provides an environment and experience like flying an airplane
- 30 Provides the angular velocity around 3 axes of space in degrees. Assists keeping a quadcopter level and facing the same direction.
- 33 Extent of curvature of a section of an airfoil
- 34 Used for describing an aircraft without a pilot (first word in UAS)
- 36 Height above the ground
- 37 Electronic equipment on an aircraft
- 39 What is flown to capture information
- 42 Remain in one place in the air
- 43 The mass of a flight system
- 44 The activity of operating or controlling an aircraft
- 46 The position of the flaps on an airplane

## DOWN

- 1 Study of the properties of moving air, and especially of the interaction between the air and solid bodies moving through it
- 3 Foremost edge of an airfoil, especially a wing or propeller (2 wds)
- 4 A key part of science investigations
- 5 Third word in UAS
- 6 A type of multicopter that has 8 motors

- 7 Impressive movements in the air made by an airplane
- 9 First priority with any flight
- 10 The propulsive force of an engine
- 11 What controls the yaw on an aircraft
- 12 The action of driving or pushing forward
- 14 A structure with curved surfaces designed to give the most favorable ratio of lift to drag in flight, the basic form of the wings
- 15 In physics, the force that makes an aircraft leave the ground and stay in the air
- 16 Type of aircraft that derives both lift and propulsion from one or more sets of horizontally revolving overhead rotors.
- 20 How fast an aircraft flies
- 22 System that controls the direction of an airplane, ship, or spacecraft that does not require a human to operate
- 23 The process of using special equipment to take measurements of something and then send by radio to another place
- 24 Amount of things that an aircraft or other vehicle is able to carry
- 25 An aircraft that is in the air
- 28 The middle word in FAA
- 29 First word in VTOL
- 31 The distance that a vehicle, especially an airplane, can travel before it needs more fuel
- 32 It has to be nice to fly
- 35 It sticks out the side of an aircraft
- 37 Second word in UAS
- 38 A measure of the angle of the blades of a propeller
- 39 The last word in LOS
- 40 Width of an airfoil from leading to trailing edge
- 41 Force that slows down movement forward
- 45 Flight term used to describe the rotation of a drone around its center axis. Controls which direction the quadcopter is facing